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Total Number of Pages in This Submission

9

Application Number

10/511,489

Filing Date

December 16, 2004

First Named Inventor

Maria V. SERGEEVA

Art Unit

1734

Examiner Name

Not Yet Assigned

Attorney Docket Number

NB 2029.00

ENCLOSURES (check all that apply)

☐ Fee Transmittal Form

☐ Fee Attached

☐ Amendment / Reply

☐ After Final

☐ Affidavits/declaration(s)

☐ Extension of Time Request

☐ Express Abandonment Request

☒ Information Disclosure Statement

☐ Certified Copy of Priority Document(s)

☐ Reply to Missing Parts/
Incomplete Application

☐ Reply to Missing Parts
under 37 CFR 1.52 or 1.53

☐ Drawing(s)

☐ Licensing-related Papers

☐ Petition

☐ Petition to Convert to a
Provisional Application

☐ Power of Attorney, Revocation
Change of Correspondence Address

☐ Terminal Disclaimer

☐ Request for Refund

☐ CD, Number of CD(s) _____

☐ Landscape Table on CD

☐ After Allowance Communication to TC

☐ Appeal Communication to Board
of Appeals and Interferences

☐ Appeal Communication to TC
(Appeal Notice, Brief, Reply Brief)

☐ Proprietary Information

☐ Status Letter

☒ Other Enclosure(s)
(please identify below):

Change of Correspondence Address
(1 page); Form PTO/SB/08a (1 page);
Form PTO/SB/08b (2 pages);
35 references; postcard receipt

Remarks

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm

Bingham McCutchen LLP

Signature

Antoinette F. Konski

Printed Name

Antoinette F. Konski

Date

April 7, 2005

Reg.
No.

34,202

CERTIFICATE OF TRANSMISSION/MAILING

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Signature

Mary R. Zimmerman

Typed or printed name

Mary R. Zimmerman

Date

April 7, 2005

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

CERTIFICATE OF MAILING

I hereby certify that this paper or fee is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this date listed below.

Dated: APRIL 7, 2005

Mary B. Zimmerman
Mary B. Zimmerman

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application for:

Maria V. SERGEEVA and Venkata
Ramana DOPPAPALUDI

Serial No.: 10/511,489

Filing Date: December 16, 2004

For: PEPTIDE DEFORMYLASE ACTIVATED
PRODRUGS

Confirmation No.: 4632

Examiner: Not Yet Assigned

Group Art Unit: 1734

INFORMATION DISCLOSURE STATEMENT

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In accordance with 37 CFR §§ 1.97 and 198, the items identified in this Information Disclosure Statement (IDS) are being brought to the attention of the Office. The items are listed on the attached forms PTO/SB/08a and PTO/SB/08b. The Examiner is requested to make these documents of record.

The items identified in this IDS may or may not be "material" pursuant to 37 CFR § 1.56. The submission thereof by Applicants is not to be construed as an admission that any such patent, publication or other information referred to therein is material or considered to be material (37 CFR § 1.97(h)), or even qualifies as "prior art" under 35 USC § 102 with respect to this invention unless specifically designated by Applicants as such.

1. Timing of the Information Disclosure Statement:

☒ This IDS is believed to be timely in that it is being submitted under 37 CFR § 1.97(b), that is (1) with the new patent application submitted herein (37 CFR § 1.97(a)); or (2) within three months of

the filing date of the application, which is not a continued prosecution application filed under § 1.53(d) or (3) within three months of entry of the national stage as set forth in 37 CFR § 1.491; or (4) before the mailing of a first Office action on the merits; or (5) before the mailing of a first Office action after filing a request for continued examination under § 1.114. Thus, no fee is required.

☒ However, if the undersigned is in error in this regard, Applicant respectfully requests that the Office consider this IDS as filed under 37 CFR § 1.97(c), if applicable, and charge the fee due under 37 CFR § 1.17(p) to the deposit account referenced below.

☐ However, if the undersigned is in error in this regard, Applicant respectfully requests that the Office consider this IDS as filed under 37 CFR § 1.97(c), if applicable, and a statement under 37 CFR § 1.97(e) is included below, thus no fee is required.

☐ This IDS is being submitted under 37 CFR § 1.97(c), that is after mailing of a first Office Action on the merits, but before a Final Action under 37 CFR § 1.113 or a Notice of Allowance under 37 CFR § 1.311.

☐ The fee due under 37 CFR § 1.17(p) is submitted herewith.

☐ The fee due under 37 CFR § 1.17(p) is being concurrently submitted with the filing of an electronic IDS submission. Thus, no additional fee is required.

☐ A statement under 37 CFR § 1.97(e) is included below, thus no fee is required. In the event that this IDS is not received before a Final Action or a Notice of Allowance, then Applicant respectfully requests that the Office consider the filing of these papers to be submitted under 37 CFR § 1.97(d) and charge the fee due under 37 CFR § 1.17(p) to the deposit account below.

☐ This IDS is being submitted under 37 CFR § 1.97(d), that is after a Final Action under 37 CFR § 1.113 or a Notice of Allowance under 37 CFR § 1.311, but before payment of the issue fee. A statement under 37 CFR § 1.97(e) is included below. The fee due under 37 CFR § 1.17(p) is submitted herewith.

☐ This IDS is being submitted under 37 CFR § 1.97(i), that is after a Final Action under 37 CFR § 1.113 or a Notice of Allowance under 37 CFR § 1.311, but before payment of the issue fee.

STATEMENT UNDER 37 CFR § 1.97(e):

☐ No item contained in this IDS was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this IDS.

☐ No item contained in this IDS was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing this statement after making

reasonable inquiry, no item of information contained in this IDS was known to any individual designated in 37 CFR § 1.56(c) more than three months prior to the filing of this IDS.

2. Copies of the Cited Items:

- ☐ Copies of all of the items listed on the attached forms PTO/SB/08a and PTO/SB/08b are enclosed.
- ☒ Copies of only the following items listed on the attached forms PTO/SB/08a (Item Nos. 12-17) and PTO/SB/08b (Item Nos. 1-29) are enclosed.
- ☒ Copies of the following items listed on the attached form PTO/SB/08a (Item Nos. 1-11) are not enclosed. See 37 CFR 1.98(a)(2)(i).
- ☐ Copies of the following documents listed in PTO/SB/08a (Item Nos. *) and PTO/SB/08b (Item Nos. *) are not supplied as they were previously cited by the Office or submitted in Information Disclosure Statements in related applications (Application No. *, filed *) and relied upon in this application for an earlier filing date under 35 USC § 120. See 37 CFR § 1.98(d). The Examiner is requested to make these documents of record.
- ☐ Copies of the following items listed on the attached forms PTO/SB/08a (Item Nos. *) and PTO/SB/08b (Item Nos. *) were cited in a foreign examination report in a related case. A copy of the search report and the cited references not already of record in this application are attached hereto.

3. Concise Explanation of Relevance:

- ☒ A concise explanation of relevance of the items listed on forms PTO/SB/08a and PTO/SB/08b is not given.
- ☐ A concise explanation of relevance of [some of] the items listed on forms PTO/SB/08a and PTO/SB/08b is in the form of an English language copy of a Search Report from a foreign patent office, issued in a counterpart application, which refers to the relevant portions of the references (copy attached).



4. Related Applications:

☒ Applicant(s) bring to the Office's attention the following related application(s): U.S. Patent Application Serial No. 10/142/089, filed May 9, 2002, and Application Serial No. 10/714,255 filed November 14, 2003.

5. Conclusion:

Citation of the above documents shall not be construed as:

1. an admission that the documents are necessarily prior art with respect to the instant invention;
2. a representation that a search has been made, other than as described above; and
3. an admission that the information cited herein is, or is considered to be, material to patentability as defined in § 1.56(b).

It is respectfully requested that the Examiner indicate consideration of the cited references by returning a copy of the attached forms PTO/SB/08a and PTO/SB/08b with initials or other appropriate marks. In the unlikely event that the transmittal letter is separated from this document and the U.S. Patent Office determines that an extension and/or other relief is required, Applicants petition for any required relief including extensions of time and authorizes the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to **Deposit Account No. 50-2518** referencing **7008512001**. However, the Commissioner is not authorized to charge the cost of the issue fee to the Deposit Account.

Respectfully submitted,

Dated: April 7, 2005

By: Antoinette F. Konski
Antoinette F. Konski
Registration No. 34,202

Bingham McCutchen LLP
Three Embarcadero Center, Suite 1800
San Francisco, California 94111-4067
Telephone: (650) 849-4400
Facsimile: (650) 849-4800



Substitute for form 1449A-PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 1 of 1

Complete if Known

Application Number	10/511,489
Filing Date	December 16, 2004
First Named Inventor	Maria V. SERGEEVA
Art Unit	1734
Examiner Name	Not Yet Assigned
Attorney Docket Number	NB 2029.00

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number Number – Kind Code ² (if known)	Publication Date MM-DD-YY	Name of Patentee or Application of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	1	US-4,053,638	10-11-77	Litchfield et al.	
	2	US-4,083,974	04-11-87	Turi	
	3	US-4,339,440	07-13-82	Bajusz et al.	
	4	US-5,918,568	07-06-99	Gjerløv	
	5	US-6,110,908	08-29-00	Guthery	
	6	US-6,143,790	11/07/00	Hallinan et al.	
	7	US-6,159,706	12-12-00	Shepard	
	8	US-6,245,750 B1	06-12-01	Shepard	
	9	US-6,339,151 B1	01-15-02	Shepard et al.	
	10	US-6,448,058 B1	09-10-02	Patel et al.	
	11	US-6,613,879 B1	09-02-03	Firestone et al.	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document Country Code ³ – Number ⁴ – Kind Code ⁵ (if known)	Publication Date MM-DD-YY	Name of Patentee or Application of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
	12	WO 98/13059 A	04-02-98	Bristol-Myers Squibb Company		
	13	WO 99/08110	02-18-99	NewBiotics, Inc.		
	14	WO 99/37753	07-29-99	NewBiotics, Inc.		
	15	WO 01/07454 A1	02-01-01	NewBiotics, Inc.		
	16	WO 02/089739 A2	11-14-02	NewBiotics, Inc.		
	17	WO 2004/43400 A2	05-27-04	NewBiotics, Inc.		

Examiner's
Signature

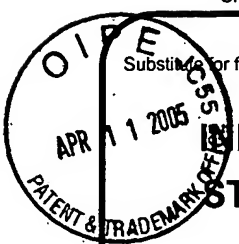
Date
Considered

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

The collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2.0 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 1 of 2

Complete if Known

Application Number	10/511,489
Filing Date	December 16, 2004
First Named Inventor	Maria V. SERGEEVA
Art Unit	1734
Examiner Name	Not Yet Assigned
Attorney Docket Number	NB 2029.00

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher city and/or country where published	T ²
	1	APFEL, C. et al. "Hydroxamic Acid Derivatives as Potent Peptide Deformylase Inhibitors and Antibacterial Agents" <i>J. Med. Chem.</i> (2000) 43:2324-2331	
	2	APFEL, C.M. et al. "Peptide Deformylase as an Antibacterial Drug Target: Assays for Detection of its Inhibition in <i>Escherichia coli</i> Cell Homogenates and Intact Cells" <i>Anti. Agents and Chemo.</i> (April 2001a) 45(4):1053-1057	
	3	APFEL, C.M. et al. "Peptide Deformylase as an Antibacterial Drug Target: Target Validation and Resistance Development" <i>Anti. Agents and Chemo.</i> (April 2001b) 45(4):1058-1064	
	4	BECKER, A. et al. "Iron Center, Substrate Recognition and Mechanism of Peptide Deformylase" <i>Nat. Struct. Biol.</i> (Dec. 1998) 5(12):1053-1058	
	5	BODUSZEK, B. "Synthesis of Novel Phosphonopeptides Derived from Pyridylmethylphosphonate Diphenyl Esters" <i>Casreact.</i> (2001) 136:279691	
	6	CHAN, M.K. et al. "Crystal Structure of the <i>Escherichia coli</i> Peptide Deformylase" <i>Biochem.</i> (1997) 36:13904-13909	
	7	CHEN, D.Z. et al. "Actinonin, a Naturally Occurring Antibacterial Agent, is a Potent Deformylase Inhibitor" <i>Biochem.</i> (2000) 39(6):1256-1262	
	8	CLEMENTS, J.M. et al. "Antibiotic Activity and Characterization of BB-3497, a Novel Peptide Deformylase Inhibitor" <i>Anti. Agents and Chemo.</i> (Feb. 2001) 45(2):563-570	
	9	de GROOT, F.M.H. et al. "Synthesis and Biological Evaluation of Novel Prodrugs of Anthracyclines for Selective Activation by the Tumor-Associated Protease Plasmin" <i>J. Med. Chem.</i> (1999) 42(25):5277-5283	
	10	de GROOT, F.M.H. et al. "Synthesis and Biological Evaluation of 2'-Carbamate-Linked and 2'-Carbonate-Linked Prodrugs of Paclitaxel: Selective Activation by the Tumor-Associated Protease Plasmin" <i>J. Med. Chem.</i> (2000) 43:3093-3102	
	11	DUBOWCHIK, G.M. and R.A. FIRESTONE "Cathepsin B-Sensitive Dipeptide Prodrugs. 1. A Model Study of Structural Requirements for Efficient Release of Doxorubicin" <i>Bioorg. & Med. Chem. Letts.</i> (1998) 8(23):3341-3346	
	12	DURAND, D.J. et al. "Peptide Aldehyde Inhibitors of Bacterial Peptide Deformylases" <i>Arch. Biochem. & Biophysics</i> (July 15, 1999) 367(2):297-302	
	13	GIGLIONE, C. et al. "Peptide Deformylase as a Target for New Generation, Broad Spectrum Antimicrobial Agents" <i>Mol. Microbiol.</i> (2000a) 36(6):1197-1205	
	14	GIGLIONE, C. et al. "Identification of Eukaryotic Peptide Deformylases Reveals Universality of N-Terminal Protein Processing Mechanisms" <i>EMBO J.</i> (2000b) 19(21):5916-5929	

Examiner's
SignatureDate
Considered

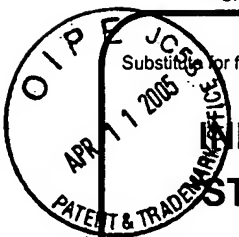
* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet **2** of **2****Complete if Known**

Application Number	10/511,489
Filing Date	December 16, 2004
First Named Inventor	Maria V. SERGEEVA
Art Unit	1734
Examiner Name	Not Yet Assigned
Attorney Docket Number	NB 2029.00

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher city and/or country where published	T ²
	15	HAO, B. et al. "Structural Basis for the Design of Antibiotics Targeting Peptide Deformylase" <i>Biochem.</i> (1999) 38(15):4712-4719	
	16	HU, Y.J. et al. "H-phosphonate Derivatives as Novel Peptide Deformylase Inhibitors" <i>Bioorg. Med. Chem. Letts.</i> (1998) 8(18):2479-2482	
	17	HUNTINGTON, K.M. et al. "Synthesis and Antibacterial Activity of Peptide Deformylase Inhibitors" <i>Biochem.</i> (2000) 39(15):4543-4551	
	18	JAYASEKERA, M.M.K. et al. "Novel Nonpeptidic Inhibitors of Peptide Deformylase" <i>Arch. Biochem. & Biophys.</i> (Sept. 15, 2000) 381(2):313-316	
	19	LACKEY, D.B. et al. "Enzyme-Catalyzed Therapeutic Agent (ECTA) Design: Activation of the Antitumor ECTA Compound NB 1011 by Thymidylate Synthase" <i>Biochem. Pharm.</i> (2001) 61:179-189	
	20	LIU, X.-J. et al. "Synthesis and Anticancer Activities of New 5-fluorouracil-1-yl Phosphonotriptides" <i>Casreact.</i> (2002) 138:106974	
	21	MEINNEL, T. "Vers une conception rationnelle de nouveaux agents antibactériens" <i>Pathol. Biol.</i> (Oct. 1999) 47(8):780-783	X
	22	MEINNEL, T. et al. "Methionine as Translation Start Signal: A Review of the Enzymes of the Pathway in <i>Escherichia coli</i> " <i>Biochimie.</i> (1993) 75(12):1061-1075	
	23	RAGUSA, S. et al. "Control of Peptide Deformylase Activity by Metal Cations" <i>J. Mol. Biol.</i> (1998) 280:515-523	
	24	RAJAGOPALAN, P.T.R. et al. "Purification, Characterization, and Inhibition of Peptide Deformylase from <i>Escherichia Coli</i> " <i>Biochem.</i> (1997) 36(45):13910-13918	
	25	RAJAGOPALAN, P.T.R. and D. PEI "Oxygen-Mediated Inactivation of Peptide Deformylase" <i>J. Biol. Chem.</i> (Aug. 28, 1998) 273(35):22305-22310	
	26	WEI, Y. and D. PEI "Continuous Spectrophotometric Assay of Peptide Deformylase" <i>Anal. Biochem.</i> (1997) 250(1):29-34	
	27	WEI, Y. et al. "Identification of a Potent Peptide Deformylase Inhibitor from a Rationally Designed Combinatorial Library" <i>J. Comb. Chem.</i> (2000a) 2(6):650-657	
	28	WEI, Y. and D. PEI "Activation of Antibacterial Prodrugs by Peptide Deformylase" <i>Bioorg. Med. Chem. Letts.</i> (2000b) 10(10):1073-1076	
	29	International Search Report dated October 15, 2003 for PCT/US2003/011981	

Examiner's
SignatureDate
Considered

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

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